

Applicant : Martin E. Newell et al.  
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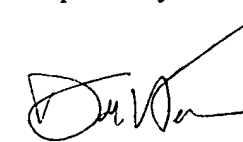
REMARKS

Attached is a marked-up version of the changes being made by the current amendment.

Applicant asks that all claims be allowed. Please apply any other charges or credits to Deposit Account No. 06-1050, reference 07844-353001.

Respectfully submitted,

Date: 9/27/2



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**Version with markings to show changes made**

**In the claims:**

1. (twice amended) A method comprising  
receiving relocation information indicative of a user-specified change in position of any  
arbitrary target location on a Bezier shape, the Bezier shape being governed by control points,  
and  
in response to the relocation information, determining new positions for canonical  
locations on the [curve or surface] Bezier shape based on predefined behaviors of the canonical  
locations with respect to the user-specified change in position, the positions of the canonical  
locations on the Bezier shape being predefined.
2. (previously amended) The method of claim 1, 23, or 24 in which the shape  
comprises a d-degree Bezier curve, d an integer greater than 1, governed by d+1 control points.
3. (unchanged) The method of claim 2 in which there are d+1 canonical locations.
4. (previously amended) The method of claim 1, 23, or 24 further comprising  
adjusting the control points so that the Bezier shape contains the canonical locations in  
their new positions.
5. (unchanged) The method of claim 1 in which the Bezier shape comprises a curve  
or a surface.
6. (previously amended) The method of claim 1, 23, or 24 further comprising  
rendering the Bezier shape based on the new positions of the d+1 canonical locations.
7. (unchanged) The method of claim 6 in which the target location in its changed  
position lies on the rendered Bezier shape.

8. (previously amended) The method of claim 1, 23, or 24 in which the predefined behaviors are expressed in response functions that define the relationship between changes in positions of target locations and changes in positions of canonical locations.

9. (previously amended) The method of claim 3 in which the Bezier shape comprises a curve, the  $d+1$  canonical locations define  $d$  sections in order along the shape from one end to the other end, and the predefined intended behavior comprises the following:

when the target location is in the first section, the one end is relocated, and the other end is constrained to its original location, and

when the target location is in the  $d$ th section, the other end is relocated and the one end is constrained to its original location.

10. (previously amended) The method of claim 1, 23, or 24 in which the Bezier shape comprises a  $d$ -degree curve, the one end and the other end comprise end points of the curve, and the target location comprises a point along the curve.

11. (previously amended) The method of claim 1, 23, or 24 in which the Bezier shape comprises a 3-degree curve and there are four canonical locations.

12. (previously amended) The method of claim 1, 23, or 24 in which the Bezier shape comprises a 2-degree curve and there are three canonical locations.

13. (previously amended) The method of claim 1, 23, or 24 in which the control points are adjusted using a pre-computed basis coefficient matrix.

14. (previously amended) The method of claim 1, 23, or 24 in which the Bezier shape comprises a surface and in which the position of the target location is determined by forming a mesh on the surface and searching quadrilaterals of the mesh.

15. (unchanged) The method of claim 11 further comprising processing the relocation information as a series of curve relocations.

16. (twice amended) A medium storing machine readable instructions arranged to cause a machine to

receive relocation information indicative of a user-specified change in position of any arbitrary target location on a Bezier shape, the Bezier shape being governed by control points, and

in response to the relocation information, determine new positions for canonical locations on the shape based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations on the Bezier shape being predefined.

17. (twice amended) A method comprising  
receiving relocation information indicative of a user-specified change in position of any arbitrary target location on a Bezier shape, the Bezier shape being governed by control points,  
in response to the relocation information, determining new positions for canonical locations on the shape based on predefined behaviors of the canonical locations, the positions of the canonical locations on the Bezier shape being predefined, the predefined intended behaviors being expressed in scaled response functions that define the relationship between changes in positions of target locations and changes in positions of canonical locations,  
adjusting the control points so that the Bezier shape contains the canonical locations in their new positions, and  
rendering the Bezier shape based on the new positions of the canonical locations so that the target location in its changed position lies on the rendered Bezier shape.

Cancel claims 18, 19, 20, 21, and 22 without prejudice.

18. (cancelled) A method comprising

enabling a user to drag a user interface element displayed on a Bezier shape to indicate a predefined distortion of the Bezier shape, the Bezier shape being governed by control points, the user interface element being displayed other than on a boundary of the shape, and  
in response to the dragging, effecting the predefined distortion by setting new positions for the control points.

19. (cancelled) The method of claim 18 in which the intended predefined distortion is effected by modifying a surface equation to effect the setting of new positions of the control points.

20. (cancelled) The method of claim 18 in which the distortion is symmetric.

21. (cancelled) The method of claim 18 in which the distortion is wave-like.

22. (cancelled) The method of claim 18 in which the user interface element comprises a handle that is constrained to move in a single direction during dragging.

23. (unchanged) A method comprising  
receiving relocation information indicative of a user-specified change in position of a target location on a Bezier curve or surface, the target location not being on a boundary of the curve or surface, the Bezier curve or surface being governed by control points, and  
in response to the relocation information, determining new positions for canonical locations on the curve or surface based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations on the Bezier shape being predefined.

24. (amended) A method comprising  
enabling a user to drag a target location on a Bezier curve or surface to indicate a new position for the target location, the target location not being on a boundary of the Bezier surface, the Bezier curve or surface being governed by control points, and

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in response to the dragging, determining new positions for canonical locations on the curve or surface based on predefined behaviors of the canonical locations with respect to the user-specified change in position, the positions of the canonical locations on the Bezier shape being predefined.